

REMARKS

Upon entry of the present amendment, claims 1-8 will remain pending in the above-identified application and stand ready for further action on the merits.

The amendments made herein to the claims do not incorporate new matter into the application as originally filed. For example, the amendment to claim 1 finds support at page 3, lines 3-14 of the specification, and the amendment of claim 2 simply corrects a typographic spelling error resulting from the side-by-side proximity of the "C" and "X" keys in a QWERTY keyboard layout.

Accordingly, entry of the instant amendment is respectfully requested at present.

Claim Objection

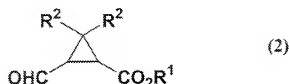
The Examiner is respectfully requested to withdraw the outstanding objection to claim 2, inasmuch as the spelling error that previously occurred in claim 2 has been corrected by way of the instant amendment.

Claim Rejection – 35 USC § 112

Claims 1-8 have been rejected under the provisions of 35 USC § 112, second paragraph. Reconsideration and withdraw of this rejection is respectfully requested based on the amendments made herein to the claims and the following considerations.

Claim 1 as instantly amended herein recites as follows:

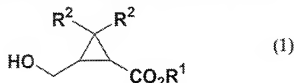
A production method of formylcyclopropanecarboxylate compound of formula (2):



wherein R^1 and R^2 are as defined below,

which comprises reacting

a cyclopropanecarboxylate compound of formula (1):



wherein R^1 represents a linear, branched or cyclic alkyl group, an aryl group which is unsubstituted or substituted with one or two or more groups selected from a C1-15 linear, branched alkyl group, cyclic alkyl group, a halogen atom, an alkoxy group, an aryl group, an aryloxy group and an alkoxycarbonyl group, or an aralkyl group which is composed of a linear, branched or cyclic alkyl group alkyl group and an aryl group which is unsubstituted or substituted with one or two or more groups selected from a C1-15 linear, branched alkyl group, cyclic alkyl group, a halogen atom, an alkoxy group, an aryl group, an aryloxy group and an alkoxycarbonyl group,

R^2 represents a hydrogen atom or a methyl group,

with at least one oxidizer selected from the group consisting of hypochlorite, N-halosuccinimide, a trichloroisocyanuric acid, and iodine, in the presence of a nitroxy radical compound.

As can be seen in the above-amended claim 1, the recited substituents therein are particularly and clearly defined, so that the claim can in no way be termed vague or indefinite. Instead, it is submitted that presently pending claim 1, and the remaining claims 2-8 that depend from claim 1, particularly and distinctly set forth the inventive discovery that the applicants regard as their own, which is all that the statute requires. In this regard, M.P.E.P. §§ 2173.01 and 2173.02, clearly state as follows:

A fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as any special meaning assigned to a term is clearly set forth in the specification. See MPEP § 2111.01. Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. As noted by the court in In re Swinehart, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought.

The examiner's focus during examination of claims for compliance with the requirement for definiteness of 35 U.S.C. 112, second paragraph, is whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available. When the examiner is satisfied that patentable subject matter is disclosed, and it is apparent to the examiner that the claims are directed to such patentable subject matter, he or she should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. Examiners are

encouraged to suggest claim language to applicants to improve the clarity or precision of the language used, but should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirement.

Claim Rejections-35 USC §103

Claims 1-8 have been rejected under the provisions of 35 USC § 103(a) as being unpatentable **Krief US '066** (US 4,408,066) in view of **Anelli et al.** (J. Org. Chem. 1987, 52, p. 2559-2562). Reconsideration and withdraw of this rejection is respectfully requested based on the following considerations.

Legal Standard for Determining Prima Facie Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary

skill in the art.” *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

“In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.” *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. “The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art.” *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Distinctions Over the Cited Art

Krief US '066 teaches a method for converting from 2,2-dimethyl-3-hydroxymethyl-cyclopropane-1-carboxylate to 2,2-dimethyl-3-formyl-cyclopropane-1-carboxylate in the presence of an oxidizing agent, such as chromic anhydride and pyridine hydrochloride in methylene chloride (*see* col. 6, lines 60 to 66).

However, *Krief US '066* does not disclose at least one oxidizer selected from the group consisting of hypochlorite, N-halosuccinimide, a trichloroisocyanuric acid and iodine, and a nitroxy radical compound.

Anelli et al. teaches a process for oxidizing primary and secondary alcohols to the corresponding aldehydes as shown in its summary (*see* page 2559, a lower section).

However, *Anelli et al.* does not disclose a compound having a cyclopropane ring. Further, *Anelli et al.* does not disclose the formylcyclopropanecarboxylate compound of formula (2) and the cyclopropanecarboxylate compound of formula (1) of the present invention.

Furthermore, the oxidizing agent disclosed by *Krief US '066* is not similar to the oxidizing agent disclosed by *Anelli et al.*. Instead, they are quite different.

For example, the oxidizing agent disclosed by *Krief US '066* is chromic anhydride and pyridine hydrochloride. Chromic anhydride is one of the heavy metal-containing reagents and pyridine hydrochloride is not a radical compound. On the other hand, the oxidizing agent disclosed by *Anelli et al.* is a hypochlorite and it is not a heavy metal-containing reagent and the nitroxy compound is a radical compound.

Therefore, it would not have been obvious to the skilled artisan in the art to employ *Anelli et al.* hypochlorite and nitroxy compound as an alternative to chromic anhydride and

pyridine hydrochloride oxidizer of *Krief US '066*. No motivation is found in the cited art to make such a substitution.

Based on the above considerations, it is submitted that one of ordinary skill in the art upon considering the teachings and disclosures of each of the cited art references of record, would not be motivated to arrive at the present invention as claimed in pending claims 1-8.

Absent such motivation in the cited art of *Krief US '066* and *Anelli et al.*, it follows that the outstanding obviousness rejection of pending claims 1-8 is not sustainable. Any contentions of the USPTO to the contrary must be reconsidered at present.

CONCLUSION

Based on the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance in the matter of the instant application, clearly indicating that each of current pending claims 1-8 are allowed and patentable under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.


Reply to Office Action of July 26, 2006

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Respectfully submitted,



By

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